

### **HHS Public Access**

J Womens Health (Larchmt). Author manuscript; available in PMC 2024 April 02.

Published in final edited form as:

Author manuscript

J Womens Health (Larchmt). 2018 October; 27(10): 1189–1194. doi:10.1089/jwh.2018.7366.

# Addressing Intimate Partner Violence to Improve Women's Preconception Health

Isabel A. Morgan, MSPH<sup>1,2</sup>, Cheryl L. Robbins, PhD<sup>1</sup>, Kathleen C. Basile, PhD<sup>3</sup>

<sup>1</sup>Division of Reproductive Health, Centers for Disease Control and Prevention, Atlanta, GA <sup>2</sup>Oak Ridge Institute for Science and Education (ORISE), Oak Ridge, TN

<sup>3</sup>Division of Violence Prevention, Centers for Disease Control and Prevention, Atlanta, GA

### Abstract

Exposure to violence can harm women's overall health and well-being. Data suggest that one in three women in the United States will experience some form of violence by an intimate partner in their lifetime. In this commentary, we describe the implications of intimate partner violence (IPV) on women's health, specifically for women of reproductive age. We use a life-course perspective to describe the compounded impact of IPV on preconception health. Preconception health generally refers to the overall health and well-being of women (and men) prior to pregnancy. This report also discusses primary prevention of IPV and health care recommendations, and highlights surveillance systems that capture IPV indicators among women of reproductive age. Ongoing collection of state-level surveillance data may inform the implementation of intervention programs tailored to reproductive aged women at risk for IPV.

### Introduction

Preconception health generally refers to the overall health and well-being of women (and men) prior to pregnancy.<sup>1,2</sup> Although interest in intimate partner violence (IPV) as a preconception health issue is evidenced in the literature,<sup>3–5</sup> a recent effort to identify a set of core preconception health indicators<sup>6</sup> does not include a focus on IPV and other topics previously included in the longer list of core preconception health indicators.<sup>7</sup> In 2011, 45 core state preconception health indicators were published to promote state monitoring of preconception health of women.<sup>7</sup> The scope of those preconception health indicators was broad and included measures of general health status and life satisfaction, social determinants of health, reproductive health, tobacco, alcohol, and substance use, nutrition, physical activity, mental health, emotional and social support, chronic conditions, and infections. Two of the 45 indicators focused on physical and psychological abuse. In 2016, the National Preconception Health and Health Care Initiative's Surveillance and Research Work Group responded to the need for more focused measurement of preconception health by using a systematic selection process that included stakeholder input to identify

Author Disclosure Statement

The authors have no conflicts of interest to report. The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

10 core preconception health national and state surveillance indicators.<sup>6</sup> These indicators include depression, diabetes, heavy alcohol use, hypertension, normal weight, recommended physical activity, current cigarette smoking, multivitamin use, recent unwanted pregnancy, and most or moderately effective postpartum contraceptive use.

As the authors acknowledged, it is not possible that any condensed set of indicators can encompass all states' priorities related to preconception health; thus, they encouraged state health departments to continue measuring and monitoring local priority preconception health indicators, in addition to the condensed set of 10 indicators.<sup>6</sup> Before publication of the 10 indicators, the Association of Maternal and Child Health Programs convened state-level maternal and child health (MCH) stakeholders at the 2016 CityMatCH Leadership and MCH Epidemiology Conference to present the proposed condensed set of preconception health indicators. Meeting participants were encouraged to provide their feedback on the 10 selected indicators. MCH stakeholders noted that IPV is an important women's health issue that may impact preconception health, yet the condensed set of preconception health indicators did not include exposure to IPV. Following the conference, the PCHHC Initiative's Surveillance and Research workgroup re-convened to consider all stakeholder feedback along with weighted scores, stakeholder and subject matter feedback, and the face validity of the collective set of core indicators.<sup>6</sup> Deliberations concluded with re-affirmation of the 10 core indicators without the addition of the IPV indicator.

While IPV was not selected as one of the 10 core indicators, it is an important public health issue that adversely impacts women's preconception health. Reducing violence by a current or former intimate partner (including physical and sexual violence, psychological abuse, and stalking) is a Healthy People 2020 developmental objective.<sup>8</sup> However, its links to preconception health have not been adequately established in practice; a content analysis of websites with preconception health information found that very few sites included content on violence prevention.<sup>9</sup>

State-level MCH stakeholders' interest in the importance of IPV for preconception health, coupled with the lack of resources for violence prevention, warrants discussion. The purposes of this commentary are to 1) describe IPV, preconception health, and how the life course perspective may be used to explain the compounded effects of violence on preconception health and pregnancy outcomes, 2) discuss primary prevention of IPV and health care recommendations, and 3) highlight surveillance systems that capture IPV indicators among women of reproductive age.

### IPV, preconception health, and life course

IPV, which comprises physical violence, sexual violence, and stalking or psychological aggression (including coercive acts) by a current or former intimate partner, is a substantial public health problem.<sup>10</sup> It is estimated that 1 in 3 women (36.4%) in the United States have experienced contact sexual violence (i.e., includes rape, being made to penetrate someone else, sexual coercion, and/or unwanted sexual contact; excludes non-contact unwanted sexual experience [e.g., flashing]), physical violence, and/or stalking victimization by an intimate partner.<sup>11</sup> Research also suggests IPV often happens early in life. A recent report

found that one in four female victims (25.8% or an estimated 11.3 million victims) of contact sexual violence, physical violence, and/or stalking by an intimate partner first experienced these or other forms of violence by that partner before their 18<sup>th</sup> birthday.<sup>11</sup>

IPV has significant negative impacts on women's reproductive health. Sexual and reproductive coercion - forms of IPV - may interfere with a woman's decision to conceive or to avoid pregnancy, and increase her risk for sexually transmitted infections (STIs).<sup>12-15</sup> The Centers for Disease Control and Prevention (CDC) defines sexual and reproductive coercion as controlling or attempting to control a partner's reproductive health or decision making, including increasing the risk for sexually transmitted disease and other adverse sexual health consequences.<sup>10</sup> In the United States, approximately 4.8% of women reported an intimate partner tried to get them pregnant when they did not want to become pregnant, and 6.7% of women reported an intimate partner refused to use condoms (a partner dependent contraceptive method).<sup>16</sup> In a systematic review of the effects of IPV on women's reproductive health, Maxwell and colleagues found that experience of IPV was associated with a significant decrease in use of condoms.<sup>17</sup> Interference with correct and consistent use of condoms or hormonal contraceptives can increase the risk for unintended pregnancies.<sup>12,18</sup> In a sample of 3,539 women attending family planning clinics in Pennsylvania, Miller and colleagues found that participants who experienced reproductive coercion in the past three months had increased odds of reporting a past-year unintended pregnancy.<sup>18</sup> Further, high-school aged girls reporting reproductive coercion were almost three times as likely as those who did not experience coercion to have chlamydia.<sup>14</sup> This suggests the importance of addressing sexual and reproductive coercion as distinct forms of IPV that can serve as indicators of risk for unintended pregnancies and STIs.

Women who experience IPV during pregnancy have increased risk of postpartum depression and suicide ideation,<sup>19</sup> and of delivering an infant who is preterm and/or low birthweight.<sup>20,21</sup> In an analysis of Pregnancy Risk Assessment Monitoring System (PRAMS) data, Pooler and colleagues identified experience of IPV as one of the most important predictors of postpartum depression.<sup>22</sup> Moreover, experiencing IPV during pregnancy increases risk of mortality for mom or baby.<sup>23–26</sup> One retrospective analysis of linked maternal discharge and birth/death certificate data found that women who delivered their baby during the hospitalization after assault had a significant increased risk of experiencing a neonatal or infant death.<sup>23</sup> Understanding and addressing the impact of IPV on women's health is critical to reducing the incidence of adverse maternal and infant health outcomes.

Manifestations of IPV also present in infants and children living in homes where there is violence.<sup>27,28</sup> Witnessing IPV is an Adverse Childhood Experience (ACEs),<sup>29</sup> which has implications for a host of adverse health outcomes, including an increased risk of perpetrating or tolerating IPV.<sup>30</sup> A longitudinal analysis examining frequency of IPV (defined based on composite Conflict Tactics Scale-2 scores) and infant development found that infants and toddlers born to women exposed to moderate levels of IPV had five times increased odds of language and neurological delays compared to children born to mothers with low levels of violence.<sup>31</sup> Mother-child bonding and emotional regulation can be disrupted when women are victimized by an intimate partner.<sup>32</sup> Pregnant women

experiencing IPV expressed concerns about the impact of the violence on their pregnancy.<sup>33</sup> Witnessing one's child experience abuse, developmental delays or less than optimal health can serve as an additional stressor for women experiencing IPV.<sup>34</sup>

Preconception care largely focuses on identifying and addressing women's health risk behaviors (e.g., smoking) and medical risks related to chronic diseases (e.g., diabetes, hypertension) that may impact pregnancy and birth outcomes.<sup>1</sup> We posit that IPV is an important but under-emphasized preconception risk factor that impacts maternal and child health outcomes and should be addressed before pregnancy.

Prevention of IPV requires an understanding of the circumstances that pose increased risk of IPV victimization. Factors associated with IPV include a history of stressful life events and victimization, such as past IPV and childhood maltreatment.<sup>35</sup> There is extensive literature on ACEs, childhood exposure to violence and victimization, and later experiences of sexual violence and IPV.<sup>36–40</sup> A life course framework is useful for understanding how exposure to violence over the life course manifests in women's overall health and well-being, particularly around the time of conception and pregnancy. Implicit in shifting the focus of modifying health behaviors and managing existing health conditions prior to conception to optimize pregnancy and birth outcomes is the notion of "critical periods". The life course perspective offers a theoretical framework that illuminates the implications of exposure to violence throughout a woman's life, including early life exposures in childhood. It is important that IPV prevention and intervention programs recognize the cumulative and perhaps latent effects and burden of stressful life events.<sup>41</sup> In the context of preconception health, risk factors for IPV often overlap with the risk factors for suboptimal pre-pregnancy health status (e.g., depression and uncontrolled diabetes)<sup>42-44</sup> and risky behaviors (e.g., cigarette smoking and heavy alcohol use).<sup>45,46</sup> Addressing the impacts of stressful life events along the life course has potential to improve women's health overall and reduce the risk of IPV.

## Primary prevention of IPV and health care recommendations related to IPV screening

Preventing ACEs and dating violence in adolescence may reduce the risk of IPV victimization in adulthood. A technical package of strategies based on the best available evidence for preventing IPV at different socioecological levels, published in 2017,<sup>47</sup> includes a focus on this early period. One particular strategy focuses on disrupting the developmental pathways toward partner violence by preventing risks in childhood including exposure to chronic stress and adverse experiences such as witnessing familial or community violence, experiencing childhood abuse and neglect, or parental substance abuse.<sup>47</sup> Approaches for disrupting these negative pathways include early childhood home visitation, preschool enrichment and family engagement programs, parent skill and family relationship programs, and treatment for at-risk youth and their families, all of which have been shown to reduce risk factors for IPV. For example, while the findings are mixed on the effectiveness of home visitation, one example program is the *Nurse Family Partnership* which has been evaluated in several randomized controlled trials (RCTs) and shown to be

effective in reducing risk factors for IPV, including a 46% relative reduction in child abuse and neglect, a key risk factor for IPV. $^{48}$ 

In adolescence, teaching safe and healthy relationship skills is another strategy that may prevent IPV, as it focuses on social emotional learning and healthy relationship approaches to improve areas such as communication and conflict resolution skills and emotional regulation.<sup>47</sup> One example of an effective social emotional learning program is *Safe Dates*, a school-based program that promotes healthy relationships and the prevention of teen dating violence. An RCT found that it reduced both perpetration and victimization of physical and sexual dating violence, with results sustained after four years. Youth exposed to *Safe Dates* reported from 56% and 92% less dating violence victimization and perpetration, respectively, at the four-year follow-up compared to controls.<sup>49</sup>

In addition to prevention strategies focused on children and youth, screening for IPV in health care settings is an approach for identifying women at risk of violence and in need of referrals to IPV support services.<sup>50</sup> Professional statements issued by the American College of Obstetricians and Gynecologists<sup>51</sup>, American Academy of Family Physicians<sup>52,53</sup>, and Association of Women's Health, Obstetric and Neonatal Nurses<sup>54</sup> describe the vital role that health care providers can assume in identifying patients experiencing IPV and referring them to appropriate social services. Further, the U.S. Preventive Services Task Force recommends screening to all women of reproductive age for IPV, regardless of the absence of signs or symptoms of abuse.<sup>55</sup> Data suggest that missed opportunities to screen women for IPV in clinical encounters persist across health care settings.<sup>56,57</sup> A systematic review on the evidence of screening in health care settings showed that screening women for IPV increased clinical identification of patients experiencing IPV, but this review did not find evidence that it increased referrals to IPV support services.<sup>58</sup> This suggests that it is important to make services available to victims and be sure that health care providers are aware of these services so they can assist patients in accessing them. Examples of how health care providers could assist patients in accessing services could include provision of onsite services and calling the service to directly connect the patient with a service provider. Clinicians who provide family planning services are in a unique position to identify and provide clinical care to women who experience IPV given that a reproductive/ family planning visit is the main source of primary health care for many women in this age group.59

When resources are available, state health departments can collaborate with academic institutions and maternal and child health organizations to develop and implement IPV screening and interventions.<sup>60</sup> For example, the Maryland Department of Health and Mental Hygiene collaborated with Johns Hopkins University to increase provider adoption of an IPV screening tool during healthcare visits. Stakeholders in violence prevention and women's health may use a collective impact model framework<sup>61,62</sup> to strategize prevention efforts aimed at reducing IPV, particularly among women of reproductive age.<sup>63,64</sup> The IPV Prevention Council – an association of domestic violence coalitions – partners with national organizations and federal agencies to advance a unified domestic violence prevention agenda.<sup>65</sup>

### Surveillance Systems that Capture Intimate Partner Violence

Surveillance of IPV is complex and can be challenging. In the past, CDC collected statelevel data on exposure to IPV among women through an optional module of the Behavioral Risk Factors Surveillance System (BRFSS), but this module was only used by a handful of states and funding for this module was only available during 2005–2007. The National Violent Death Reporting System, the National Survey of Family Growth, and PRAMS provide national or state level data on IPV, but not all states collect IPV data inclusive of physical, emotional, sexual and psychological abuse. Also for PRAMS, these data are restricted to women with a recent live birth. Additionally, those surveillance systems are not dedicated IPV surveillance systems and therefore do not contain data on the various forms of violence that constitute IPV.

The most comprehensive source of IPV victimization data comes from the National Intimate Partner and Sexual Violence Survey (NISVS) – an ongoing surveillance system which is focused exclusively on violence and describes and monitors sexual violence and stalking by any perpetrator, and all forms of IPV, including physical aggression, psychological aggression, sexual violence, control of reproductive or sexual health, and stalking at the national and state levels. NISVS was launched in 2010 and the first report included limited state level data.<sup>66</sup> More recently, the CDC Division of Violence Prevention released a NISVS State Report, which pooled data across three years (2010–2012) to generate comprehensive national and state-level estimates.<sup>67</sup> State IPV data from NISVS could serve as a very useful tool moving forward for states that are focusing on IPV as part of their preconception health work. Ongoing state-level surveillance data are critical to document the prevalence of exposure to violence and to inform prevention programs to address IPV.

### Conclusions

Given the adverse impact of IPV on women's health across the life course, state health departments and maternal and child health researchers may consider monitoring the prevalence of IPV as a preconception health indicator by using available IPV surveillance systems at state levels, and identifying and implementing strategies to prevent IPV exposure among women of reproductive age.

### Acknowledgements

We would like to thank the members of the Preconception Health and Health Care Initiative's Surveillance and Research Work Group for their contributions to identifying the condensed set of preconception health indicators and participants of the 2016 CityMatCH and MCH Epidemiology Conference for expressing a need to evaluate the impact of exposure to violence on preconception health.

### References

- 1. Verbiest S, McClain E, Woodward S. Advancing preconception health in the United States: strategies for change. Ups J Med Sci. 2016:1–5. [PubMed: 26479863]
- 2. Berglund A, Lindmark G. Preconception health and care (PHC)-a strategy for improved maternal and child health. Ups J Med Sci. 2016:1–6. [PubMed: 26479863]

- Alhusen JL, Geller R, Dreisbach C, Constantoulakis L, Siega-Riz AM. Intimate Partner Violence and Gestational Weight Gain in a Population-Based Sample of Perinatal Women. J Obstet Gynecol Neonatal Nurs. 2017;46(3):390–402.
- Cha S, Chapman DA, Wan W, Burton CW, Masho SW. Intimate partner violence and postpartum contraceptive use: the role of race/ethnicity and prenatal birth control counseling. Contraception. 2015;92(3):268–275. [PubMed: 25935298]
- Cha S, Masho SW. Intimate partner violence and utilization of prenatal care in the United States. J Interpers Violence. 2014;29(5):911–927. [PubMed: 24203982]
- Robbins CL, D'Angelo D, Zapata L, et al. Preconception Health Indicators for Public Health Surveillance. J Womens Health (Larchmt). 2018;27(4):430–443. [PubMed: 29323604]
- Broussard DL, Sappenfield WB, Fussman C, Kroelinger CD, Grigorescu V. Core state preconception health indicators: a voluntary, multi-state selection process. Matern Child Health J. 2011;15(2):158–168. [PubMed: 20225127]
- 2020 HP. Injury and Violence Prevention https://www.healthypeople.gov/2020/topics-objectives/ topic/injury-and-violence-prevention/objectives. Accessed May 10, 2017.
- Thompson EL, Vazquez-Otero C, Vamos CA, Marhefka SL, Kline NS, Daley EM. Rethinking Preconception Care: A Critical, Women's Health Perspective. Matern Child Health J. 2017;21(5):1147–1155. [PubMed: 28078529]
- 10. Breiding MJ BK, Smith SG, Black MC, Mahendra RR. Intimate Partner Violence Surveillance: Uniform Definitions and Recommended Data Elements, Version 2.0. Atlanta, GA 2015.
- Smith SG, Zhang X, Basile KC, Merrick M, Wang J, Kresnow M, Chen J National Intimate Partner and Sexual Violence Survey: 2015 Data Brief. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention;2018.
- Holliday CN, McCauley HL, Silverman JG, et al. Racial/Ethnic Differences in Women's Experiences of Reproductive Coercion, Intimate Partner Violence, and Unintended Pregnancy. J Womens Health (Larchmt). 2017.
- Miller E, Decker MR, McCauley HL, et al. Pregnancy coercion, intimate partner violence and unintended pregnancy. Contraception. 2010;81(4):316–322. [PubMed: 20227548]
- Northridge JL, Silver EJ, Talib HJ, Coupey SM. Reproductive Coercion in High School-Aged Girls: Associations with Reproductive Health Risk and Intimate Partner Violence. J Pediatr Adolesc Gynecol. 2017;30(6):603–608. [PubMed: 28668360]
- Bauer HM, Gibson P, Hernandez M, Kent C, Klausner J, Bolan G. Intimate partner violence and high-risk sexual behaviors among female patients with sexually transmitted diseases. Sex Transm Dis. 2002;29(7):411–416. [PubMed: 12170131]
- Breiding MJ, Chen J., & Black MC. Intimate Partner Violence in the United States— 2010. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention;2014.
- Maxwell L, Devries K, Zionts D, Alhusen JL, Campbell J. Estimating the effect of intimate partner violence on women's use of contraception: a systematic review and meta-analysis. PLoS One. 2015;10(2):e0118234. [PubMed: 25693056]
- Miller E, McCauley HL, Tancredi DJ, Decker MR, Anderson H, Silverman JG. Recent reproductive coercion and unintended pregnancy among female family planning clients. Contraception. 2014;89(2):122–128. [PubMed: 24331859]
- 19. Gelaye B, Kajeepeta S, Williams MA. Suicidal ideation in pregnancy: an epidemiologic review. Arch Womens Ment Health. 2016;19(5):741–751. [PubMed: 27324912]
- Chen PH, Rovi S, Vega ML, Barrett T, Pan KY, Johnson MS. Birth Outcomes in Relation to Intimate Partner Violence. J Natl Med Assoc. 2017;109(4):238–245. [PubMed: 29173930]
- Hill A, Pallitto C, McCleary-Sills J, Garcia-Moreno C. A systematic review and meta-analysis of intimate partner violence during pregnancy and selected birth outcomes. Int J Gynaecol Obstet. 2016;133(3):269–276. [PubMed: 27039053]
- Pooler J, Perry DF, Ghandour RM. Prevalence and risk factors for postpartum depressive symptoms among women enrolled in WIC. Matern Child Health J. 2013;17(10):1969–1980. [PubMed: 23329168]

- 24. Yost NP, Bloom SL, McIntire DD, Leveno KJ. A prospective observational study of domestic violence during pregnancy. Obstet Gynecol. 2005;106(1):61–65. [PubMed: 15994618]
- Palladino CL, Singh V, Campbell J, Flynn H, Gold KJ. Homicide and suicide during the perinatal period: findings from the National Violent Death Reporting System. Obstet Gynecol. 2011;118(5):1056–1063. [PubMed: 22015873]
- Chambliss LR. Intimate partner violence and its implication for pregnancy. Clin Obstet Gynecol. 2008;51(2):385–397. [PubMed: 18463468]
- Burke JG, Lee LC, O'Campo P. An exploration of maternal intimate partner violence experiences and infant general health and temperament. Matern Child Health J. 2008;12(2):172–179. [PubMed: 17549615]
- Tough SC, Siever JE, Benzies K, Leew S, Johnston DW. Maternal well-being and its association to risk of developmental problems in children at school entry. BMC Pediatr. 2010;10:19. [PubMed: 20338052]
- 29. Substance Abuse and Mental Health Services Administration: Adverse Childhood Experiences. https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioralhealth/adverse-childhood-experiences. Accessed July 8 2018.
- Stith SM, Rosen KH, Middleton KA. The Intergenerational Transmission of Spouse Abuse: A Meta-Analysis. Journal of Marriage and the Family. 2000;62:640–654.
- Udo IE, Sharps P, Bronner Y, Hossain MB. Maternal Intimate Partner Violence: Relationships with Language and Neurological Development of Infants and Toddlers. Matern Child Health J. 2016;20(7):1424–1431. [PubMed: 26992715]
- 32. Boeckel MG, Wagner A, Grassi-Oliveira R. The Effects of Intimate Partner Violence Exposure on the Maternal Bond and PTSD Symptoms of Children. J Interpres Violence. 2015.
- 33. Alhusen JL, Wilson D. Pregnant mothers' perceptions of how intimate partner violence affects their unborn children. J Obstet Gynecol Neonatal Nurs. 2015;44(2):210–217.
- 34. Kubany ES, Hill EE, Owens JA, et al. Cognitive trauma therapy for battered women with PTSD (CTT-BW). J Consult Clin Psychol. 2004;72(1):3–18. [PubMed: 14756610]
- 35. Vieira EM, Perdona Gda S, Santos MA. Factors associated with intimate partner physical violence among health service users. Rev Saude Publica. 2011;45(4):730–737. [PubMed: 21655702]
- 36. Minh A, Matheson FI, Daoud N, et al. Linking childhood and adult criminality: using a life course framework to examine childhood abuse and neglect, substance use and adult partner violence. Int J Environ Res Public Health. 2013;10(11):5470–5489. [PubMed: 24169410]
- Ullman SE, Najdowski CJ, Filipas HH. Child sexual abuse, post-traumatic stress disorder, and substance use: predictors of revictimization in adult sexual assault survivors. J Child Sex Abus. 2009;18(4):367–385. [PubMed: 19842535]
- Rich CL, Gidycz CA, Warkentin JB, Loh C, Weiland P. Child and adolescent abuse and subsequent victimization: a prospective study. Child Abuse Negl. 2005;29(12):1373–1394. [PubMed: 16293305]
- Arata CM. From child victim to adult victim: a model for predicting sexual revictimization. Child Maltreat. 2000;5(1):28–38. [PubMed: 11232060]
- Pittenger SL, Pogue JK, Hansen DJ. Predicting Sexual Revictimization in Childhood and Adolescence: A Longitudinal Examination Using Ecological Systems Theory. Child Maltreat. 2018;23(2):137–146. [PubMed: 29017333]
- Martin SL, Griffin JM, Kupper LL, Petersen R, Beck-Warden M, Buescher PA. Stressful life events and physical abuse among pregnant women in North Carolina. Matern Child Health J. 2001;5(3):145–152. [PubMed: 11605719]
- Leeners B, Rath W, Block E, Gorres G, Tschudin S. Risk factors for unfavorable pregnancy outcome in women with adverse childhood experiences. J Perinat Med. 2014;42(2):171–178. [PubMed: 24334452]
- 43. Barrios YV, Gelaye B, Zhong Q, et al. Association of childhood physical and sexual abuse with intimate partner violence, poor general health and depressive symptoms among pregnant women. PLoS One. 2015;10(1):e0116609. [PubMed: 25635902]

- Mason SM, Tobias DK, Clark CJ, Zhang C, Hu FB, Rich-Edwards JW. Abuse in Childhood or Adolescence and Gestational Diabetes: A Retrospective Cohort Study. Am J Prev Med. 2016;50(4):436–444. [PubMed: 26547539]
- 45. Pear VA, Petito LC, Abrams B. The Role of Maternal Adverse Childhood Experiences and Race in Intergenerational High-Risk Smoking Behaviors. Nicotine Tob Res. 2017;19(5):623–630. [PubMed: 28403466]
- 46. Hannan SM, Orcutt HK, Miron LR, Thompson KL. Childhood Sexual Abuse and Later Alcohol-Related Problems: Investigating the Roles of Revictimization, PTSD, and Drinking Motivations Among College Women. J Interpres Violence. 2015.
- 47. Niolon PH, Kearns M, Dills J, Rambo K, Irving S, Armstead T, & Gilbert L Preventing Intimate Partner Violence Across the Lifespan: A Technical Package of Programs, Policies, and Practices. Atlanta, GA 2017.
- Olds DL, Eckenrode J, Henderson CR Jr., et al. Long-term effects of home visitation on maternal life course and child abuse and neglect. Fifteen-year follow-up of a randomized trial. JAMA. 1997;278(8):637–643. [PubMed: 9272895]
- Foshee VA, Bauman KE, Ennett ST, Linder GF, Benefield T, Suchindran C. Assessing the longterm effects of the Safe Dates program and a booster in preventing and reducing adolescent dating violence victimization and perpetration. Am J Public Health. 2004;94(4):619–624. [PubMed: 15054015]
- Hamberger LK, Rhodes K, Brown J. Screening and intervention for intimate partner violence in healthcare settings: creating sustainable system-level programs. J Womens Health (Larchmt). 2015;24(1):86–91. [PubMed: 25412012]
- 51. ACOG Committee Opinion No. 518: Intimate partner violence. Obstet Gynecol. 2012;119(2 Pt 1):412–417. [PubMed: 22270317]
- 52. Dicola D, Spaar E. Intimate Partner Violence. Am Fam Physician. 2016;94(8):646–651. [PubMed: 27929227]
- American Academy of Family Physicians: Violence (Position Paper) 2014; http://www.aafp.org/ about/policies/all/violence.html. Accessed August 10, 2017.
- AWHONN Position Statement. Intimate partner violence. J Obstet Gynecol Neonatal Nurs. 2015;44(3):405–408.
- 55. U.S. Preventive Services Task Force: Final Update Summary: Intimate Partner Violence and Abuse of Elderly and Vulnerable Adults: Screening. 2016; https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/ intimate-partner-violence-and-abuse-of-elderly-and-vulnerable-adults-screening. Accessed May 10, 2017.
- Swailes AL, Lehman EB, McCall-Hosenfeld JS. Intimate partner violence discussions in the healthcare setting: A cross-sectional study. Prev Med Rep. 2017;8:215–220. [PubMed: 29159016]
- Sutherland MA, Fantasia HC, Hutchinson MK. Screening for Intimate Partner and Sexual Violence in College Women: Missed Opportunities. Womens Health Issues. 2016;26(2):217–224. [PubMed: 26329257]
- O'Doherty L, Hegarty K, Ramsay J, Davidson LL, Feder G, Taft A. Screening women for intimate partner violence in healthcare settings. Cochrane Database Syst Rev. 2015(7):CD007007. [PubMed: 26200817]
- 59. Frost JJ, Gold RB, Bucek A. Specialized family planning clinics in the United States: why women choose them and their role in meeting women's health care needs. Womens Health Issues. 2012;22(6):e519–525. [PubMed: 23122212]
- 60. Wilkins N, Myers L, Kuehl T, Bauman A, Hertz M. Connecting the Dots: State Health Department Approaches to Addressing Shared Risk and Protective Factors Across Multiple Forms of Violence. J Public Health Manag Pract. 2018;24 Suppl 1 Supplement, Injury and Violence Prevention:S32-S41.
- Boyce B. Collective impact: aligning organizational efforts for broader social change. J Acad Nutr Diet. 2013;113(4):495–497. [PubMed: 23522573]

- Aragon TJ, Garcia BA, Population Health Division Leadership T. Designing a learning health organization for collective impact. J Public Health Manag Pract. 2015;21 Suppl 1:S24–33. [PubMed: 25423053]
- 63. Wasco SM, Campbell R, Howard A, et al. A statewide evaluation of services provided to rape survivors. J Interpers Violence. 2004;19(2):252–263. [PubMed: 15011687]
- 64. Nesbit B, Hertz M, Thigpen S, et al. Innovative Methods for Designing Actionable Program Evaluation. J Public Health Manag Pract. 2018;24 Suppl 1 Supplement, Injury and Violence Prevention:S12-S22.
- 65. Understanding Intimate Partner Violence Prevention as Social Change Work. 2017; https:// preventipv.org/vision. Accessed April 15, 2018.
- 66. Black MC, Basile KC, Breiding MJ, Smith SG, Walters ML, Merrick MT, Chen J, & Stevens MR The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 summary report. 2011.
- Smith SG, Chen J, Basile KC, Gilbert LK, Merrick MT, Patel N, Walling M, Jain A. The National Intimate Partner and Sexual Violence Survey (NISVS): 2010–2012 State Report. Atlanta, GA 2017.